



## E-CIGARETTE TRENDS, CONCERNS, RECOMMENDATIONS

Maura J. Rossman, MD

MACHO President

Howard County Health Officer

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### WHAT ARE E-CIGARETTES?

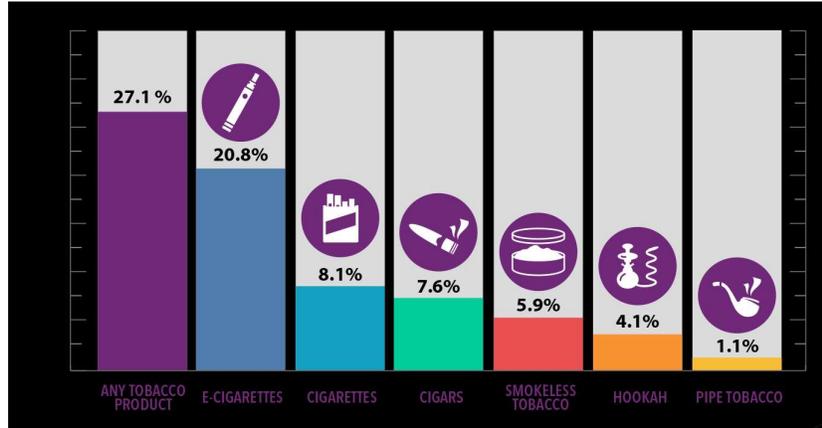
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E-cigarettes are sometimes called “e-cigs,” “vapes,” “e-hookahs,” “vape pens,” and “electronic nicotine delivery systems (ENDS).” Some e-cigarettes look like regular cigarettes, cigars, or pipes. Some look like USB flash drives, pens, and other everyday items.



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## E- CIGARETTES ARE POPULAR AMONG YOUTH

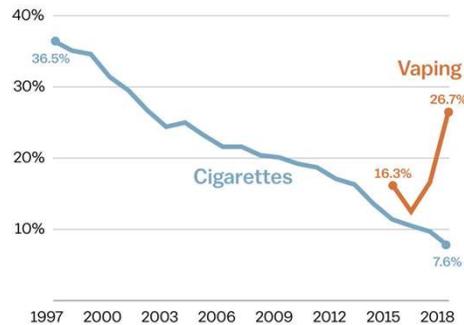


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## VERY POPULAR!

### Teen vaping is surging

Trends in use of cigarettes and vape devices in the past 30 days among 12th-graders



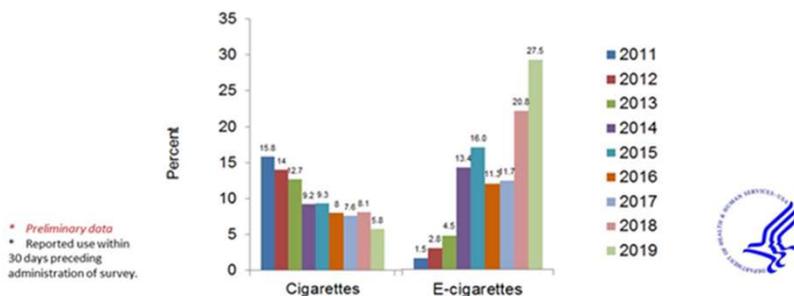
Source: "National Adolescent Drug Trends in 2018," NEJM



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## NATIONAL YOUTH TOBACCO SURVEY TRENDS

### NATIONAL YOUTH TOBACCO SURVEY\*: YOUTH USE OF E-CIGARETTES CONTINUES TO CLIMB

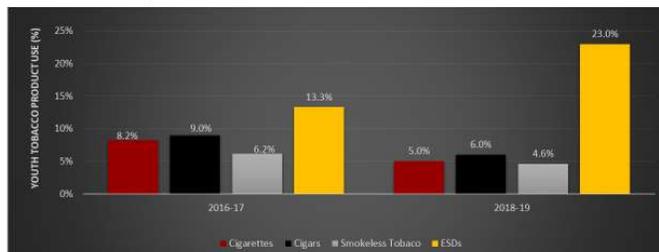


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## MARYLAND TRENDS

### Tobacco Use Among Maryland High School Youth: 2016-2017 and 2018-2019

Youth Tobacco Product Use, Maryland YRBS/YTS



Source: Maryland Department of Health, YRBS/YTS 2019. Unpublished



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## JAMA NOVEMBER 5, 2019 E-CIGARETTE USE AMONG YOUTH IN THE UNITED STATES, 2019

Karen A. Cullen, PhD<sup>1</sup>; Andrea S. Gentzke, PhD<sup>2</sup>; Michael D. Sawdey, PhD<sup>1</sup>; et al

- 27.5 % use among High School students
- 10.5 % use among middle school students

### 2019 Youth Tobacco Survey

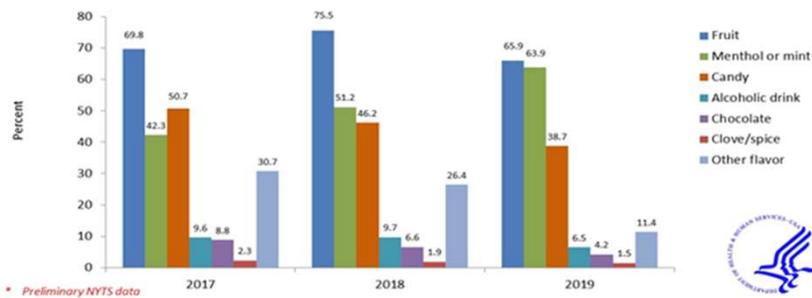
- Over 5 million youth are currently using e – cigarettes
- Nearly 1 million used the product daily
- About 1.6 million use 20 or days per month
- Majority report using JUUL as their usual brand (60%)
- Flavorings are popular (mint, mango, fruit)



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## MENTHOL/MINT ARE MOST POPULAR FLAVOR

### FLAVORS POPULAR AMONG HIGH SCHOOL USERS OF E-CIGARETTES\*



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## PEDIATRICS OCTOBER 28 2019: E- CIGARETTE FLAVORING AND TEEN USE

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- A study by Leventhal published Oct. 28 in the journal Pediatrics found that teens who use flavored e-cigarettes are more likely to become regular users and vape more heavily.
- A study by Chen-Sankey published October 28 in the journal Pediatrics found teens exposure to e-cig marketing stimulates e-cigarette use.



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## E-CIGARETTES USE – WHAT ARE THE CONCERNS?

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### Risks

- Unsafe for kids, teens, and young adults
- Highly addictive
- Exposure user to harmful chemicals that cause cancer
- Contain addictive nicotine that harms brain development
- Lead to other nicotine/tobacco use
- Can contain ingredients that cause severe lung disease and death

### Benefits

- The potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products

Source: CDC



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## MARYLAND YOUTH ASSOCIATED RISK

### Maryland Data: Youth Use of ESDs

#### Youth ESD Users Increased Likelihood of Engaging in Risk Behaviors

- 34% of youth ESD users also use cigarettes, 35% use cigars, and 25% use smokeless tobacco.
- Youth electronic cigarette use, like tobacco use, is **highly correlated with other risk behaviors** including drinking alcohol, marijuana use, and prescription drug abuse.

4 times increased likelihood of drinking alcohol

5 times more likely to use marijuana

4 times more likely to abuse prescription drugs

26  
Source: Maryland Department of Health, Monitoring Changing Tobacco Use Behaviors: 2000 - 2008.



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## E-CIGARETTE AND VAPING RELATED LUNG INJURY

### CDC Update and Epidemiology

Seventy percent of those who became ill were male:



**2,172\*** cases of e-cigarette, or vaping, product use associated lung injury (EVALI) have been reported to CDC

Cases have been reported from 49 states (all except Alaska), the District of Columbia, and 1 U.S. territory.

**42 deaths** have been confirmed in 24 states, and D.C.

Median age of deceased patients was 53 years and ranged from 17 to 75 years.

49 confirmed/probable cases in Maryland to date.

Approximately **79 percent** of patients are under 35 years old.

The latest findings suggest products containing THC play a role in the outbreak.

FDA is conducting broad-spectrum testing for contaminants.

\*The current number includes only confirmed and probable cases reported by states to CDC after classification, as of November 13, 2019.

#### A note from the CDC:

- E-cigarette, or vaping, products should never be used by youth, young adults, or women who are pregnant.
- Adults who do not currently use tobacco products should not start using e-cigarette, or vaping, products. There is no safe tobacco product. All tobacco products, including e-cigarettes, carry a risk.

Source: [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html); <https://www.nytimes.com/2019/11/03/health/vaping-lung-disease.html>



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CM1  
CM2

# VAPING ILLNESSES AS OF NOV. 20, THERE HAVE BEEN 2,290 VAPING ILLNESSES AND 47 DEATHS

51 confirmed or probable cases in Maryland



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## FINDING THE CAUSE

### Investigators Find Clue to Mysterious Vaping Injuries

Vitamin E oil was detected in all 29 samples taken from vaping patients tested by the CDC

- Vitamin E oil (acetate) found in fluid in lungs of all 29 patients from ten states (including Maryland)
- “Potential toxin of concern”, not enough to be labeled a “cause”
- Could still be more than one culprit.
- THC found in 23 samples (82%); nicotine in 16 (63%)

Center for Disease Control and Prevention  
**MMWR**  
Morbidity and Mortality Weekly Report  
November 8, 2019

**Evaluation of Bronchoalveolar Lavage Fluid from Patients in an Outbreak of E-cigarette, or Vaping, Product Use–Associated Lung Injury — 19 States, August–October 2019**

*(Text from the report follows, including details on the study and findings.)*



THE WALL STREET JOURNAL  
November 8, 2019



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## Slide 13

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**CM1** Maura -- 51 cases as of November 19, 2019 in Maryland

Cliff Mitchell, 11/26/2019

**CM2** Also, CDC uses the November 20, 2019 reporting date in its Vaping Page.

Cliff Mitchell, 11/26/2019

## RECOMMENDATIONS

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### RESTRICT ACCESS

- ✓ Increase legal age to purchase tobacco products including e-cigarettes. (New Maryland Tobacco 21 Law)
- Limit locations/distance where e-cigarettes may be sold. (Montgomery County)
- Ban the sale of flavored products. (Massachusetts, New York, Michigan)
- Require age verification for DtC sales and delivery.



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## RECOMMENDATIONS

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### ADDRESS MARKETING

- Restrict marketing of products to youth and public.
- Use tested public health counter marketing and educational campaigns.

### DISCOURAGE USE

- ✓ Require childproof packaging (Federal Law)
- Require health warning messages on packaging.
- Tax E-cigarette products. (19 States and DC)



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